

## Gulf of Mexico Harmful Algal Bloom Bulletin

29 December 2006

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: December 28, 2006

### Conditions Report

A harmful algal bloom has been identified in patches from southern Sarasota to Collier Counties and in Monroe County, north and west of the Keys. From today through Sunday and on Tuesday, patchy very low impacts are possible in southern Collier County. On Monday, patchy low impacts are possible in southern Collier County, and patchy very low impacts are possible in southern Sarasota and southern Charlotte Counties. No other impacts are expected today through Tuesday throughout the identified bloom region.

### Analysis

This bulletin is being issued as supplemental due to the upcoming federal holidays. Due to federal government closures for New Years Day and in remembrance for former President Gerald R. Ford, the next bulletin will be issued on Wednesday, January 3, 2007.

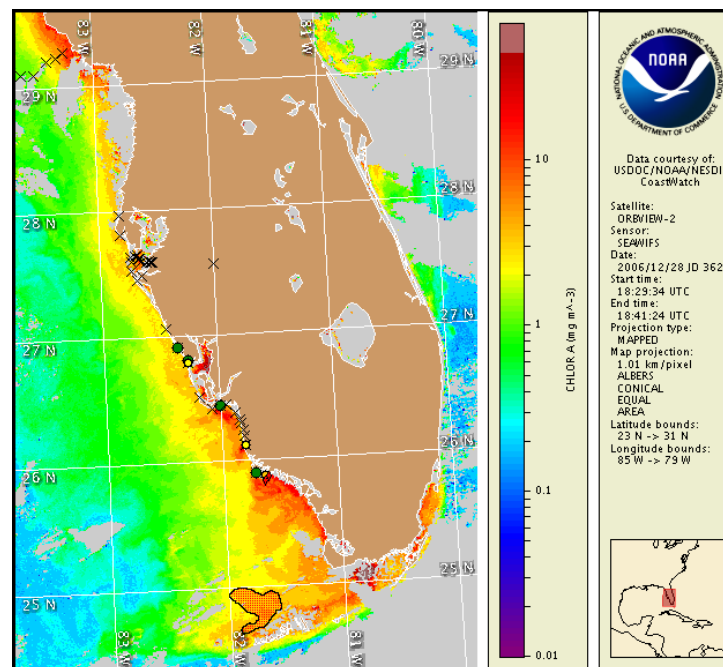
A harmful algal bloom persists at the coast in patches from southern Sarasota to Collier Counties, and additionally in offshore portions of Charlotte County. Very low to background concentrations of *K. brevis* were reported by FWRI at Naples Pier and Marco Island, southern Collier County, and in southern Charlotte County at Gasparilla Fishing Pier on 12/28. Chlorophyll levels continue to appear elevated up to  $16 \mu\text{g/L}$  in a patch south of Sanibel Island from  $26^\circ 25.4' \text{N}$ ,  $82^\circ 2.9' \text{W}$  to  $26^\circ 21.4' \text{N}$ ,  $81^\circ 55.2' \text{W}$  and in a second patch southwest of Naples, centralized at  $26^\circ 5.8' \text{N}$ ,  $81^\circ 50.6' \text{W}$ . In southern Collier County, chlorophyll levels are elevated from  $9\text{--}20 \mu\text{g/L}$  south of Cape Romano, centralized at  $25^\circ 49.5' \text{N}$ ,  $81^\circ 43.1' \text{W}$  and in a band alongshore from  $25^\circ 52' \text{N}$ ,  $81^\circ 37.5' \text{W}$  to  $25^\circ 43.7' \text{N}$ ,  $81^\circ 23.4' \text{W}$ . Slight intensification of *K. brevis* is possible through Sunday. Slight offshore southerly transport of *K. brevis* is possible through Tuesday.

In the Florida Keys region, chlorophyll levels are elevated well offshore to the north in a patch centralized at  $25^\circ 20.4' \text{N}$ ,  $82^\circ 28.7' \text{W}$ . Additionally, chlorophyll levels are elevated just north of the Lower Keys from  $25^\circ 0' \text{N}$ ,  $81^\circ 57.9' \text{W}$  to  $24^\circ 44' \text{N}$ ,  $81^\circ 42.6' \text{W}$ , and continuing west to  $24^\circ 36' \text{N}$ ,  $81^\circ 58.6' \text{W}$ . Slight westward transport is possible through Tuesday.

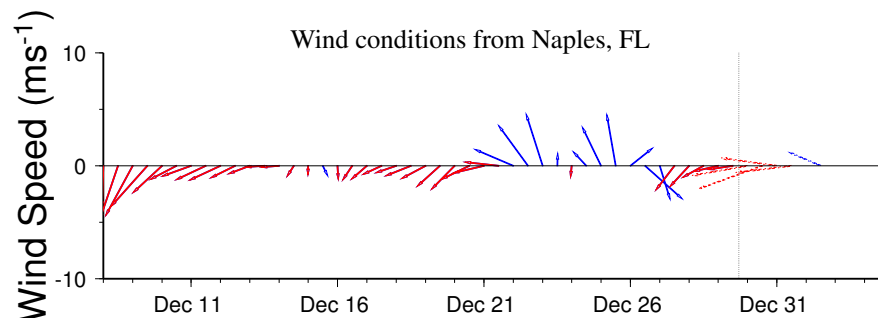
~Fisher, Bronder

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1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.



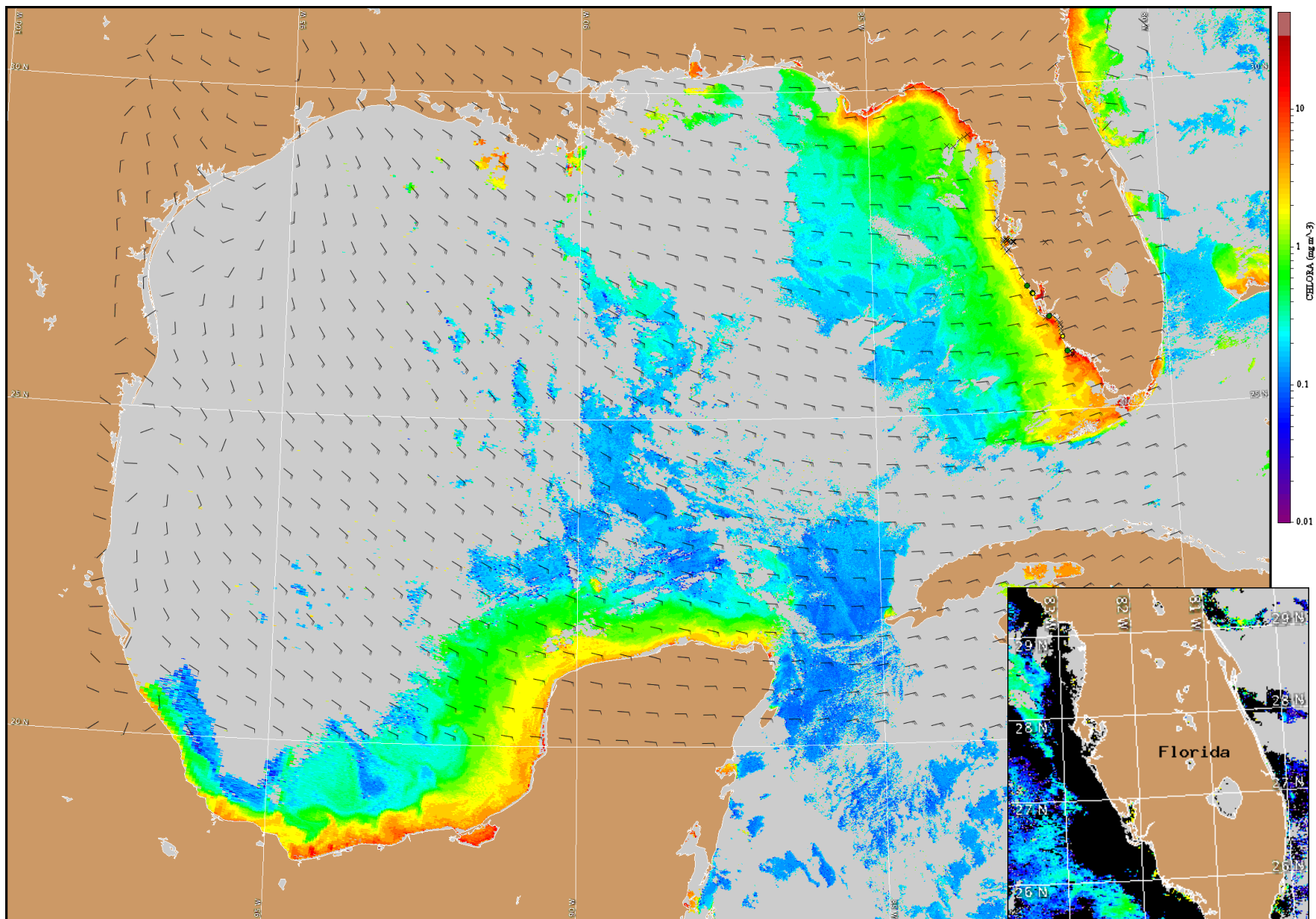
Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration categories and corresponding cell count values from Florida Fish and Wildlife Research Institute. For a key to the cell concentration descriptions, visit <http://research.myfwc.com>. Cell concentration sampling data from December 19-28 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



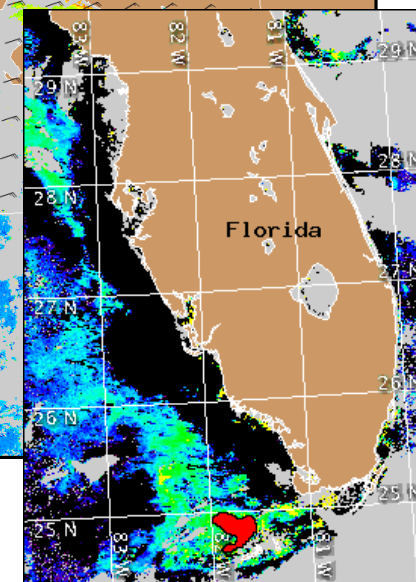
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: Winds will be east (15 kts, 8 m/s) today and tomorrow, southeast (15 kts, 8 m/s) Sunday, southeast becoming southwest (15 kts, 8 m/s) Monday, north (10 kts, 5 m/s) Tuesday.

FL Keys: Winds will be east (15 kts, 8 m/s) today, east (20 kts, 10 m/s) tomorrow, southeast (15 kts, 8 m/s) Sunday, east to southeast (15 kts, 8 m/s) Monday and Tuesday.

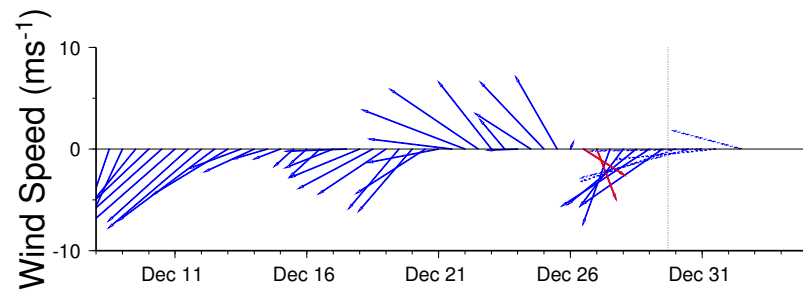


Satellite chlorophyll image and forecast winds for December 30, 2006 12Z with cell concentration sampling data from December 19-28 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Verified HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).

Wind conditions from Sand Key, FL



Wind conditions from Venice Pier, FL

